

ABSTRACT OF DISCLOSURE

The invention relates to a method for producing integrable semiconductor components, especially transistors or logic gates, using a p-doped semiconductor substrate. First of all, a mask is applied to the semiconductor substrate in order to define a window that is delimited by a peripheral edge. An n-doped trough is then produced in the semiconductor substrate by means of ion implantation using an energy that is sufficient for ensuring that a p-doped inner area remains on the surface of the semiconductor substrate. The edge area of the n-doped trough extends as far as the surface of the semiconductor substrate. The other n-doped and/or p-doped areas that make up the structure of the transistor or logic gate are then inserted into the p-doped inner area of the semiconductor substrate. The inventive method is advantageous in that it no longer comprises expensive epitaxy and insulation processes. In an n-doped semiconductor substrate, all of the implanted ions are replaced by the complementary species; i.e. n is exchanged for p and vice versa.